

In re Application of DEWEY et al.
Serial No. 10/021,392

REMARKS

The Office action has been carefully considered. The Office action rejected claims 1, 2, 4-7, 9, 12-15, 17, 19, 20-27, 30, 32-36, and 41 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,008,853 to Bly et al. ("Bly") in view of U.S. Patent No. 6,510,552 to Benayoun et al. ("Benayoun"). Further, the Office action rejected claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Bly in view of Benayoun and in further view of U.S. Patent No. 5,832,508 to Sherman et al. ("Sherman"). Further yet, the Office action rejected claims 8 and 29 under 35 U.S.C. § 103(a) as being unpatentable over Bly in view of Benayoun and in further view of U.S. Patent No. 6,662,164 to Harrison et al. ("Harrison"). Still further, the Office action rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Bly in view of Benayoun and in further view of U.S. Patent No. 6,112,024 to Almond et al. ("Almond"). The Office action rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Bly in view of Benayoun and in further view of U.S. Patent No. 6,598,059 to Vasudevan et al. ("Vasudevan"). The Office action rejected claims 16 and 37 under 35 U.S.C. § 103(a) as being unpatentable over Bly in view of Benayoun and in further view of U.S. Patent No. 5,873,103 to Trede et al. ("Trede"). The Office action rejected claims 18 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Bly in view of Benayoun and in further view of U.S. Patent No. 6,610,105 to Martin Jr. et al. ("Martin"). The Office action rejected claim 31 under 35 U.S.C. § 103(a) as being unpatentable over Bly in view of Benayoun and in further view of U.S. Patent No. 5,787,411 to Groff et al. ("Groff"). The Office action rejected claim 38 under 35 U.S.C. § 103(a)

In re Application of DEWEY et al.
Serial No. 10/021,392

as being unpatentable over Bly in view of Benayoun and in further view of U.S. Patent No. 4,503,499 to Mason et al. ("Mason"). The Office action rejected claims 39-40 under 35 U.S.C. § 103(a) as being unpatentable over Bly in view of Benayoun and in further view of U.S. Patent No. 6,212,512 to Barney et al. ("Barney"). Applicants respectfully disagree.

By present amendment, claims 1 and 32 have been amended for clarification and not in view of the prior art. Applicants submit that the claims as filed were patentable over the prior art of record, and that the amendments herein are for purposes of clarifying the claims and/or for expediting allowance of the claims and not for reasons related to patentability. Reconsideration is respectfully requested.

Applicants thank the Examiner for the interview held (by telephone) on August 15, 2005. During the interview, the Examiner and applicants' attorney discussed the claims with respect to the prior art. The essence of applicants' position is incorporated in the remarks below.

Prior to discussing reasons why applicants believe that the claims in this application are clearly allowable in view of the teachings of the cited and applied references, a brief description of the present invention is presented.

The present invention is directed to a system and method for automatically and transparently providing access to prior versions of files and/or folders in a computer system. More specifically, one embodiment of the present invention is directed to a method for receiving a request to locate at least one version of a selected file or folder. The system then automatically obtains a set of data

In re Application of DEWEY et al.
Serial No. 10/021,392

corresponding to at least one prior version of that selected file or folder in response to the request. Information about the prior version and accessibility to the prior version is then returned wherein the information corresponds to the set of data in response to the request.

Thus, a user may request the version location through a shell user interface that enables the user to request I/O operations on enumerated files or folders. For example, if a user views the files in a folder hosted on a remote server, a task or command is available (*i.e.*, by right-clicking) that enables the user to retrieve prior versions of a selected file or folder. Selecting this task causes an application programming interface or the like to communicate with the server to obtain the file's or folder's history, comprising a list of read-only, point-in-time shadow copies of the file or folder contents.

In one embodiment, a timestamp identifying each shadow volume is returned when a file or folder is selected for version recovery. The individual volumes can be queried for file attribute information, such that the list can be filtered, whereby the user can select from a list that identifies files and folders that actually exist on shadow volumes. Filtering non-unique files can also be performed, so that the user sees only one version rather than multiple unchanged versions that may be available. Once the user is provided with the list of available versions, a timestamp-identified version can be selected from the list, whereby the selected version will be restored. In this manner, prior file or folder versions can be restored simply, rapidly, and with minimal expense.

In re Application of DEWEY et al.
Serial No. 10/021,392

Note that the above description is for example and informational purposes only, and should not be used to interpret the claims, which are discussed below.

Turning to the claims, amended claim 1 recites a computer-implemented method, comprising receiving a request directed to locating at least one version of a selected file or folder, automatically obtaining a set of data corresponding to at least one prior version of that selected file or folder in response to the request, the set of data enabling the accessibility of the at least one prior version of the selected file or folder, and returning information corresponding to the accessibility of the at least one version of the file or folder and to the accessibility of the at least one prior version of the selected file or folder in response to the request wherein selection of the at least one prior version of the file will cause the at least one version of the file to be replaced by the at least one prior version of the file.

The Office action rejected claim 1 as being unpatentable over Bly in view of Benayoun. More specifically, the Office action contends that Bly teaches receiving a request directed to locating at least one version of a selected file or folder. Column 3, lines 60-67 of Bly is referenced. Further, the Office action contends that Bly teaches automatically obtaining a set of data corresponding to at least one prior version of that selected file or folder, the set of data enabling the accessibility of the at least one prior version of the selected file or folder. Column 19, lines 56-63, column 20, lines 60-68, column 37, lines 7-10 and Fig. 12 of Bly are referenced. Further yet, the Office action contends that Bly teaches returning information corresponding to the accessibility of the at least one version of the file or folder and

In re Application of DEWEY et al.
Serial No. 10/021,392

to the accessibility of the at least one prior version of the selected file or folder in response to the request. Column 20, lines 60-68, and Fig. 5 of Bly are referenced.

In a previous Office action, it was acknowledged that Bly does not teach automatically obtaining a set of data corresponding to at least one prior version of that selected file or folder. Further, the present Office action acknowledges that Bly does not teach wherein selection of the at least one prior version of the file will cause the at least one version of the file to be replaced by the at least one prior version of the file. However, the Office action contends that Benayoun does teach this recitation (at column 3, lines 24-30) and that the combination of Bly and Banayoun would have been obvious to a person skilled in the art at the time the invention was made because if a user of the system of Bly believes that a current version is erroneous, then they may be able to retrieve a previous version by initiating a delete command as taught by Benayoun. Applicants respectfully disagree.

To establish *prima facie* obviousness of a claimed invention, all of the claim recitations must be taught or suggested by the prior art; (*In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)), and "all words in a claim must be considered in judging the patentability of that claim against the prior art;" (*In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). Further, if prior art, in any material respect teaches away from the claimed invention, the art cannot be used to support an obviousness rejection. *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed Cir. 1997). Moreover, if a modification would render a

In re Application of DEWEY et al.
Serial No. 10/021,392

reference unsatisfactory for its intended purpose, the suggested modification / combination is impermissible. See MPEP § 2143.01

Applicants submit that the Office action has failed to establish a *prima facie* case for obviousness. As has been argued in the previous Office action response, applicants submit that the interpretation by the Office action of the teachings of Bly is flawed. Bly is directed, generally, toward a multi-user collaborative work system that is able to maintain a shared book of related structured data objects that many users may simultaneously work with and update. See column 18, lines 14-24. As such, the shared book contains several entries which are defined in Bly as parts of the publication. That is, the entries are not versions of the same parts but rather different parts of the same shared book. See column 18, lines 60-67. As the individual parts (entries) are modified by a user, the newly modified version may be uploaded to the server containing the shared book such that the older version is replaced (*i.e.*, erased). In fact, the system in Bly specifically will not allow two versions of the same type of structured data object. See column 18 lines 50-51.

To an extent, the system in Bly does, however, generally appear to maintain a record and files of previous versions of entries in a remote file location for the primary purpose of manually retrieving previous versions. See column 37, lines 7-22. The storage of previous versions however, is unrelated to the maintenance of proper working versions. That is, although Bly may store previous versions, the previous versions themselves and information relating to the previous versions are not automatically available upon request. Rather, a user must go manually searching for them in a remote file location and manually manipulate the files much

In re Application of DEWEY et al.
Serial No. 10/021,392

like any other system in the prior art. In fact, Bly specifically states that once a user is viewing the remote location folder with the prior versions of files, the user may not move or delete any files, but rather only copy files which is evidence of even further limitations of the system of Bly.

Thus, several patentable differences between the prior art of record and the recitations of claim 1 remain as argued in the previous Office action response. First, claim 1 recites automatically obtaining a set of data corresponding to at least one prior version of that selected file or folder that may be maintained such that the prior version's data is accessible. That is, the prior version is said to be accessible in that the prior version may be retrieved and restored in response to the original request. The system in Bly does not maintain any prior version in this manner that is accessible by an initial request for all versions of files, thus, any prior version, although available if it can be found through manual folder manipulation, copying, and file sharing, cannot possibly be automatically accessible via an initial request.

Second, claim 1 recites locating at least one version and then automatically obtaining a set of data corresponding to at least one prior version. That is, when a file or folder is first requested, not only is the location of the file or folder obtained, but also data about prior version is automatically assembled. In contrast, Bly does not teach automatically assembling the prior version list. Rather, when a user selects the entry property sheet, (and only after the user identifies the exact location of the initial file) then a list of revisions is presented (although the actual versions corresponding to the revision history are not available locally because they were not stored anywhere on the local machine). Rather, in order to retrieve

In re Application of DEWEY et al.
Serial No. 10/021,392

any prior version, a user must manually navigate to remote computer folder locations and manipulate files stored therein in order to retrieve previous versions. Thus, Bly teaches nothing more than what was currently available in any file/folder system of the time. As such, the system of Bly does not teach automatically obtaining a set of data corresponding to at least one prior version in response to the request as recited in claim 1.

Further, Bly even teaches away from the recitations of claim 1 in that it is desirable in the system of Bly to not restore previous versions of entries precisely to avoid the possibility of multiple users modifying entries that are not the most current entry. That is, it the aim of the system of Bly to not allow users to be able to easily access older versions of entries because to do so would eliminate the benefit of a multi-user collaborative work system if a user were able to bypass the guard against modifying entries that are not up-to-date. Furthermore, even after a user manually locates the folder containing the prior versions of the files, the user is still limited to copying files and may not move or delete any files. See column 37, lines 5-22. When prior art, in any material respect teaches away from the claimed invention, the art cannot be used to support an obviousness rejection. *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed Cir. 1997).

Finally, claim 1 has recites the set of data enabling the accessibility of the at least one prior version of the selected file or folder, and returning information corresponding to the accessibility of the at least one prior version of the selected file or folder in response to the request wherein selection of the at least one prior version of the file will cause the at least one version of the file to be replaced by the

In re Application of DEWEY et al.
Serial No. 10/021,392

at least one prior version of the file. That is, the information indicating that prior version exist also specifically enables the accessing of these prior versions and when selected, the prior version may be restored. Bly, as has been discussed above and acknowledged by the Office action, does not store previous versions of the files in an accessible and restorable manner. Rather, Bly merely teaches storing an indication that the file has been changed locally and storage of previous versions of files remotely, but the actual prior version is simply not accessible in that the prior version does not exist anywhere locally and must be specifically sought out through folder and file manipulation by the user.

Benayoun does not cure this deficiency in that Benayoun is merely an example of art that maintains a last-in-time file structure for files being manipulated. Specifically, the cited and applied section of Benayoun teaches a process by which a user may maintain prior versions of a file after modifications. The user may then delete a current version and automatically revert back to the most recent version of the file. By known operating system standards, this may be thought of as simply an "undo" function. However, simply showing that Benayoun teaches a process for restoring a previous version of a file as evidence that a person skilled in the art at the time the invention was made would have found it obvious to combine with Bly is overly broad and conclusory. Again, Bly lacks motivation to be combined with a prior version file restoration solution in that Bly is specifically directed to preventing previous versions from overwriting newer modified versions. Such broad, conclusory statements do not come close to adequately addressing the issue of motivation to combine, are not evidence of obviousness, and therefore are

In re Application of DEWEY et al.
Serial No. 10/021,392

improper as a matter of law. *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Further, any motivation to combine is improper in that Bly teaches away from the present invention. As such, Bly, whether considered alone or in any permissible combination with the Benayoun or other prior art of record simply fails to teach or suggest the recitations of claim 1. For at least the foregoing reasons, applicants submit that claim 1 is patentable over the prior art of record.

Applicants respectfully submit that dependent claims 2-20, by similar analysis, are allowable. Each of these claims depends either directly or indirectly from claim 1 and consequently includes the recitations of independent claim 1. As discussed above, Bly and Benayoun fail to teach or suggest the recitations of claim 1. Furthermore, none of the prior art of record, whether considered alone or in any permissible combination, teaches or suggests the recitations of claim 1, and therefore these claims are also allowable over the prior art of record. In addition to the recitations of claim 1 noted above, each of these dependent claims includes additional patentable elements.

For example, claim 7 recites that the shadow volumes are maintained on at least one remote server. The shadow volume in the present invention contains at least one prior version of the requested file or folder. As discussed above, Bly does not teach storing any prior versions in a manner accessible by request. In fact, the cited portion of Bly in which the Office action bases its rejection simply does not teach anything about a shadow volume, a backup share, or anything remotely related to a duplicate version of the same data stored at two different

In re Application of DEWEY et al.
Serial No. 10/021,392

locations. Further, all information stored with regard to a shared book resides on the same computer and not on a remote server as recited in claim 7. Applicants submit that claim 7 is patentable over the prior art of record for at least this additional reason.

Turning to the next independent claim, claim 21 recites in a computer network, a system comprising a local client, the local client having an interface configured to receive a request directed to locating at least one prior version of a selected file, a network communication mechanism, a remote file server connected to the local client via the communication mechanism, the remote file server having at least one prior version of the selected file maintained thereon; and the interface communicating a request for file version information to the remote file server, the remote file server responding to the request by returning a set of data corresponding to the at least one prior version of the selected file maintained thereon, and the interface displaying information corresponding to the at least one